The Corps
of
Royal Canadian Electrical and Mechanical Engineers

A Unique LAD

The Story of No. 131 Light Aid Detachment, RCEME,
Attached to 1 Canadian Rocket Battery, RCA,
during the Second World War

Edited By

Doug Knight





The RCEME Heritage Archives

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At the end of the Second World War in Europe, every unit in First Canadian Army was ordered to write a brief unit war history (not to be confused with the unit war diary). When it was completed, they could go home. Those units with a peacetime journalist or historian in their ranks wrote weighty tomes (2nd Heavy Anti-aircraft Regiment's history is more than 100 foolscap pages of text, plus appendices). Others were much shorter.

The 1st Canadian Rocket Battery, RCA, was a unique unit that used a 32-tube or 30-tube multiple rocket launcher, then called a "land mattress". A British officer designed the launcher, but when the British Army displayed no interest in the equipment, the project was taken over by Canadian Military Headquarters in Britain. The first ten launchers were fabricated "for operational trials" by a small bottling equipment manufacturer, Meyer-Dunford, with minimal drawings or specifications. RCEME Staff Sergeant A.W. Holmes and several RCEME craftsmen assisted in the manufacture of both the prototypes and production models.

The rockets were a blend of surplus and scrap parts. The 60-pound warhead originated with the Royal Navy and the Royal Air Force donated the rocket motors. The army had a large quantity of Type 721 fuses that had been scrapped for safety reasons, but it was decided to use them anyway. More than 600,000 scrapped fuses had to be manually sorted in order to find the correct variant. No 1. Canadian Base Workshop manufactured adapters so that these parts could be assembled into a single rocket.

The warhead had a drag spoiler attached to assist in varying the range but, at the extreme ends of the manufacturing tolerances, the spoiler and the fuze was incompatible. So the fuses had to be culled again during the final rocket assembly to eliminate those that would not fit.

In operations, unit transport picked up the components at a port, and delivered them to the battery, where everyone from the Battery Commander down sorted through the various tolerances and hand assembled the rockets. They were never part of the supply system.

There was no formal establishment for the battery. The allies had air superiority and, to man the launchers, a small cadre of trained officers and senior NCOs essentially took over an under-employed light anti-aircraft battery who traded in their anti-aircraft guns and learned how to fire the rocket.. The battery fired its first "operational trial" at German open-topped antiaircraft gun positions in Flushing on 1 November 1944. The results were very successful, and the battery supported most major attacks for the rest of the war. The "operational trials" were deemed complete at the end of 1944, and the existence of the rocket battery was accepted and formalized.

To put things in perspective as a weapon system, the 60-pound warhead was the equivalent of a 5.5-inch medium artillery shell. A medium artillery regiment had 16 guns – one launcher was the equivalent of two medium regiments, and there were ten to twelve launchers in the battery. The rocket launcher was slow to reload, but as shock weapon, the impact of the equivalent of a slavo from more than twenty medium regiments was devastating. On 8 November 1944, the battery supported the First Polish Armoured Division in their second attack on Breda-Moerdijk - a previous attack by the Poles having been repulsed. Just after noon, a full battery salvo of 382 rockets was fired into Moerdijk. This second attack killed about 150 Germans and captured about 400 prisoners, at a cost of only twelve Polish casualties.

Supporting a unique artillery unit naturally required a unique Light Aid Detachment (existing LADs were classified “A” to “E” based on the type of unit they supported). What follows, with very minor editing, is the unit war history of No. 127 (later 131) LAD – the only type “F” LAD in the British Empire. These are not my words – this is their story.

A “Land Mattress” of 1 Canadian Rocket Battery, RCA

131 Light Aid Detachment, RCEME
attached to 1 Canadian Rocket Battery, RCA

This unit was formed as 127 LAD "Type 'F' LAD" on 19 January 1945, on a field return basis. The first personnel were posted to the unit on 25 January were Lieutenant W.N. Tripp (officer commanding), Armament Staff Sergeant Dekelver, Armourer Sergeant McClatchey, Corporal Mackin, Lance Corporal McPherson, and Craftsmen Barker, Ryan, Wall, and Smith. Our original equipment was one Diamond T Medium breakdown (wrecker), one 3-ton stores lorry, one 60-cwt truck, one Willy's jeep, and three 10-cwt trailers.

With this equipment, a handful of scrounged hand tools and all the good wishes of First Canadian Army Troops Workshop, the LAD set out for Hilvarenbeek camp, the home of the Rocket Battery, to commence work under the able direction of Lt. Tripp. The 1st Canadian Rocket Battery then had some 78 “B” [wheeled] vehicles, 100 artillery instruments of various sorts, and 12 Meyer-Dunford rocket projectors. [The Meyer-Durnford launchers were the first prototype version of the equipment, produced for the “operational trials” - ed]. Our first survey of this equipment showed that the vehicles were in poor condition and the projectors, due to bad design, were a source of continuous trouble. We went to work immediately. We were at a disadvantage in that our men frequently had jobs entirely new to them, few of us having seen a projector before.

We soon developed a plan of action for our job, after watching the operation of the Rocket Battery itself in a few shoots on 3 February 1945. This plan was to have two electricians on the gun site during firing operations, while Lt. Tripp and AQMS Dekelver were in the rear noting the operation of the projectors. After operations, these four discussed their observations, suggesting modifications and improvements. In this way, many faults were brought to light and remedied before they could become serious. Two War Office representatives, Lt-Cols Benning and Armitage, gave us invaluable assistance. The projectors were put in 100% firing order.

7 February to 9 March 1945

The LAD saw field action from 7 February to 9 March, often under most adverse conditions. At several places we had to pass through our own forward defense lines in order to reach our destination. We were frequently under enemy fire both from mortar and aircraft. On one occasion, a Jerry mortar bomb exploded close to our prized, new “Tilling Stevens” 30-barrel projector, our only one, several pieces of shrapnel piercing two barrels. [The Tilling Stephens version of the launcher was the production version - ed]. This occurred at 0730 hours and by 1700 hours the same day, the damaged barrels had been removed, new ones (taken from a N/S Meyer-Dunford projector) altered, cut to proper length and installed and the projector was back in action. During this period, our breakdown vehicle was called out on an average of four nights per week, each job taking up to five hours. This recovery work was done on vehicles from other units than the Rocket Battery, and frequently included 10-ton Mack trucks and several flame-throwing carriers.

No major repairs were attempted by the LAD except when absolutely necessary due to an accident, as it involved a 125-mile round trip to the workshop in Tilburg. We used plenty of

ingenuity and did the best we knew. Up to 9 March we had 148 jobs, of which only 8 vehicles were evacuated out of a total of 87 and one projector out of a total of 23. It should be stressed that this unit was greatly hampered by the lack of a suitable battery charger and an arc welder, both of which are essential for servicing rocket batteries. Each projector has two 6-volt batteries in its firing mechanism, which must be kept up to full charge for the most efficient operation of the mechanism. Providence came to our aid in the finding of a 6.5 Kw arc welder (double-operator), which was modified by the LAD into a combination welder and battery charger capable of handling 100 six-volt batteries at one time. Up to 9 March we charged 190 batteries of all types and sizes found in a unit like this.

9-31 March 1945

Our complement is now one officer and l5 other ranks including one armourer sergeant whom we are not able to find much work for. We inspected all the unit vehicles once a month and this policy proved very sound. There were 184 jobs, including 80 vehicles, and of these 20 were evacuated to the workshop, and 12 projectors which were repaired and modified on the basis of our previous observations. For example, the firing switches were mounted on pressed paper panels, which warped badly in poor weather. We replaced the paper panel with a panel of German bakelite which proved highly satisfactory. We charged 70 batteries in this period.

The battery received twenty-four new Tilling-Stevens projectors, which were definitely superior to the Meyer-Dunfords, particularly in the firing circuits. These we inspected and modified. This included bracing the back plate to eliminate warping, moving the dial sight bracket up to allow 360 degrees of sight, installing dust covers on the elevating gears and installing a projection rail for the elevating screw to prevent it from bending when the projector was being loaded. Between 13 and 20 March we inspected 37 vehicles, 211 projectors [each projector several times], and 65 small arms and machine guns.

The battery saw action again on 20 March. We were unable to accompany them but sent a motor vehicle fitter, an electrician, and a small stock of parts for running repairs. At this time the LAD was engaged in readying 12 projectors, 12 gun tractors, and fifteen 60-cwt trucks for action with another rocket battery which needed them in a hurry. Our name has now been changed to 131 LAD as of 31 March 1945.

1-30 April 1945

We completed 35 projector jobs, mainly modifications to give greater stability when firing. Fifteen Bedford Light Anti-aircraft Tractors were also modified to enable them to carry one salvo of rockets per truck. This required doors on the back and the removing of the spare barrel rack, which also gave the gun crew more room. We repaired 40 vehicles, only 8 being evacuated to workshops. Our inspection plan is showing rich dividends already. Our jobs for April totalled 107, ranging from the manufacture of a pancake griddle to the complete overhaul of the old and nearly worn out Meyer-Dunford projectors. Our battery charging tapered off to 50 for the month, the battery having acquired a small 2360-32 volt Onan charger of their own.

We had two moves for operations, one of which was cancelled after a journey of 75 miles to the intended scene of action. The LAD, incidentally, had to be prepared to move on twenty minutes

notice all the time. During the latter part of the month we accumulated a 2.5-KVA 220-volt AC generator all combined on the one chassis - a trailer we made from a smashed gun tractor chassis - and all powered by a Ford V8 which took care of the whole load very nicely at 1,800 RPM's.

1-31 May 1945

The beginning of May found us in the bush with no cover under which to work. Every day we had less work to do, due greatly to our efforts of the preceding three months. We moved to Enschede on the 9th May and for the first time were able to procure a decent building to work in. We made good use of it as the equipment was now rolling back from the front after the German collapse. We called each projector vehicle and instrument in as soon as they arrived for a routine check and found them in very good shape. Total jobs for the month dropped to 75. Our work policy had paid off.

On 14 May we received the sad news from Mr. Tripp, who was in England on leave, that he was in the hospital and did not expect to return to us. At this time we were working on modifying a Tilling-Stevens for greater ease in handling. Originally this projector, weighing 2,900 pounds, had to be lifted bodily onto its front pad. By 24 May we had our modification completed and put through its trials. It cut the time of going into action by over one-half and also the coming out of action by the same amount. Several officers from the Canadian Experimental Branch came down to see our prize model and expressed their satisfaction. The modification was to cut two inches out of the frame (rear over-hang) allowing the projector to sit back farther in its action position. This raised the front support permitting the pad to be placed under the elevating support with ease. Thus with this modification, the projector is similar to an ordinary two-wheel trailer in handling. On 30 May, Lieutenant M.B. Crerar arrived as replacement officer for Lieutenant Tripp.

1-21 June 1945

All equipment has been checked and classified and work has almost come to a standstill. The Battery turned 37 gun tractors and 24 projectors into the demobilization vehicle park on 13 June. Of this total two were class 3, seven class 2 and twenty-eight class 1. This shows the 100% improvement in the vehicles over their original condition. The OC of the Battery was very pleased with the classification and expressed his surprise at the great change in mechanical condition of these vehicles.

We had worked like Trojans to get the vehicles in this condition. Our activity report for the week ending 15 June 1945 reads like a fairy-tale. All instruments packed, greased and waterproofed, 100 vehicles classified (2 class 3, 18 class 2, 80 class 1) and 24 projectors classified (all class 1).

Apart from this one feverish week and two moves - Enschede to Demobilization Vehicle Park. Park to Utrecht - the month was spent largely in sports and recreation. We knew that disbandment was in the offing and it was a case of waiting for the axe to fall, as it were. According to our latest information the LAD, after 5 months of hard work under all conditions, will be "Kaput" on 21 June. Thus ends the story of the brief and hectic life of the only type "F" LAD in the forces of the Empire.